OM protein - protein search, using sw model

GenCore version 5.1.6
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Run on: August 19, 2003, 13:15:55 ; Search time 74 Seconds
                   (without alignments)
                   1623.730 Million cell updates/sec

Title: US-09-494-297-2
Perfect score: 3945
Sequence: 1 MKKTRFPNKLNTLNTQRVLS..........IAGISLGIWGIHIRIRKHD 757

Scoring table: BLOSUM62
                   Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 1107863

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
                   Maximum Match 100%
                   Listing first 45 summaries

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SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	3945	100.0	762	23	ABP29047	Streptococcus poly
2	236.5	6.0	340	23	ABP29050	Streptococcus poly
3	181	4.6	905	20	AAW89421	Moraxella catarrha
4	180	4.6	597	21	AAY90257	Streptococcus equi
5	178	4.5	898	20	AAW89413	Moraxella catarha
6	161	4.1	1416	20	AAY00211	Enterococcus faeca
7	161	4.1	1416	23	ABP43430	E faecalis EF104 a
8	161	4.1	1416	24	ABU13709	Enterococcus faeca
9	161	4.1	1448	20	AAY00210	Enterococcus faeca
10	161	4.1	1448	23	ABP43429	E faecalis EF104 p
11	159	4.0	1448	24	ABU13708	Enterococcus faeca
12	156	4.0	1612	23	ABB47333	Listeria monocytog
13	155	4.0	1530	23	ABB47329	Listeria monocytog
14	154	3.9	832	23	ABB47336	Listeria monocytog
15	152.5	3.9	1849	18	AAW17900	Photorhabdus lumin
16	152	3.9	2013	23	ABB47751	Listeria monocytog
17	152	3.9	2516	19	AAW56573	Toxin TcdA11, enco
18	152	3.9	2517	20	AAB72609	Photorhabdus lumin
19	152	3.9	2516	18	AAW17899	Toxin TcdA, encode
20	152	3.9	1849	19	AAW56572	Photorhabdus lumin
21	150	3.8	2537	22	AAB72611	Photorhabdus tcdA
22	149	3.8	2516	23	ABG32651	P. luminescens (W-
23	149	3.8	2537	22	AAB72614	Modified Photorhab
24	149	3.8	2537	22	AAE22273	Streptococcal fibr
25	149	3.8	1161	23	AAB72614	TcdA toxin-zein ER
26	149	3.8	1315	24	AAY08642	S. aureus SdrD pro
27	149	3.8	1315	20	ABJ18969	Pathogen specific
28	149	3.8	2032	20	AAY00238	Enterococcus faeca
29	149	3.8	2032	20	AAY00240	Enterococcus faeca
30	149	3.8	2032	20	AAY00242	Enterococcus faeca
31	149	3.8	2032	23	ABP43457	E faecalis EF123 P
32	149	3.8	2032	23	ABP43459	E faecalis EF124 P
33	147	3.8	2032	24	ABU13736	Enterococcus faeca
34	147	3.8	2032	24	ABU13738	Enterococcus faeca
35	146	3.8	2032	24	ABU13740	Enterococcus faeca
36	147	3.7	1349	22	AAU34402	Staphylococcus aur
37	147	3.7	1349	22	AAU37544	Staphylococcus aur
38	146	3.7	1563	22	ABB58432	Drosophila melanog
39	145	3.7	1185	13	AAR22675	Collagen binding p
40	145	3.7	1112	20	AAY08603	S. pyogenes SFPBP-
41	144.5	3.7	940	23	ABB47334	Listeria monocytog
42	144.5	3.7	1092	19	AAW41602	Staphylococcus epi
43	144.5	3.7	2261	24	ABJ18914	Pathogen specific
44	144.5	3.7	2283	24	ABP56876	Staphylococcus epi
45	144.5	3.7	2344	22	AAU37120	Staphylococcus aur

ALIGNMENTS

RESULT 1
ABP29047
ID   ABP29047 standard; Protein; 762 AA.
XX
AC   ABP29047;
XX
DT   02-JUL-2002 (first entry)
XX
DE   Streptococcus polypeptide SEQ ID NO 7270.
XX
KW   Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae;
KW   group A streptococcus; Streptococcus pyogenes; antibacterial;
KW   antiinflammatory; infection; vaccine; meningitis; gene therapy.
XX
OS   Streptococcus pyogenes.
XX
PN   WO200234771-A2;
XX
PD   02-MAY-2002
XX
PF   29-OCT-2001; 2001WO-GB04789.
PR   07-MAR-2001; 2001GB-0005640.
PR   24-NOV-2000; 2000GB-0028727.
PR   27-OCT-2000; 2000GB-0026333.
XX
PA   (CHIR-) CHIRON SPA.
PA   (GENO-) INST GENOMIC RES.
XX
PI   Telford J, Masignani V, Margarit Ros YI, Grandi G, Fraser C;
PI   Tettelin H;
XX

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

```
DR   WPI; 2002-352536/38.
DR   N-PSDB; ABN9678.
XX
PT   New Streptococcus protein for the treatment or prevention of infection
PT   or disease caused by Streptococcus bacteria, such as meningitis, and
PT   for detecting a compound that binds to the protein -
XX
PS   Claim 1; Page 3879; 4525pp; English.
XX
CC   The invention relates to a protein (ABP25413-ABP308095) from group B
CC   streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS
CC   (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in
CC   the specification. The proteins have antibacterial and antiinflammatory
CC   activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and
CC   antibodies that bind (I) are used in the manufacture of medicaments for
CC   the treatment or prevention of infection or disease caused by
CC   Streptococcus bacteria, particularly S. agalactiae and S. pyogenes.
CC   Nucleic acids encoding (I) are used to detect Streptococcus in a
CC   biological sample. (I) is used to determine whether a compound binds to
CC   (I). A composition comprising (I) or a nucleic acid encoding (I), may be
CC   used as a vaccine or diagnostic composition. The disease caused by
CC   Streptococcus that is prevented or treated may be meningitis. Nucleic
CC   acid encoding (I) may be used to recombinantly produce (I) and may be
CC   used in gene therapy. Antibodies to (I) are used for affinity
CC   chromatography, immunoassays, and distinguishing/identifying
CC   Streptococcus proteins.
XX
SQ   Sequence  762 AA;

Query Match          100.0%;  Score 3945;  DB 23;  Length 762;
Best Local Similarity  100.0%;  Pred. No. 2.4e-285;
Matches 757;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1  MKKTRFPNKLNTLNFQRVLSKNSKRFTVTLVGVFLMIFALVTSMVGAKTVFGLVESSTPN  60
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Db    6  MKKTRFPNKLNTLNFQRVLSKNSKRFTVTLVGVFLMIFALVTSMVGAKTVFGLVESSTPN  65

Qy   61  AINPDSSSEYRWYGYESYVRGHPYYKQFRVAHDLRVNLEGSRSYQVYCFNLKKAFPLGSD 120
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   66  AINPDSSSEYRWYGYESYVRGHPYYKQFRVAHDLRVNLEGSRSYQVYCFNLKKAFPLGSD 125

Qy  121  SSVKKWYKHDGISTKFEDYAMSPRITGDELNQKLRAVMYNGHPQNANGIMEGLEPLNAI  180
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  126  SSVKKWYKHDGISTKFEDYAMSPRITGDELNQKLRAVMYNGHPQNANGIMEGLEPLNAI  185

Qy  181  RVTQEAVWYSDNAPISNDESFKRESESNLVSTSQLSLMRQALKQLIDPNLATKMPKQV   240
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Db  186  RVTQEAVWYSDNAPISNDESFKRESESNLVSTSQLSLMRQALKQLIDPNLATKMPKQV   245

Qy  241  PDDFQLSIFESEDKGDKYNKGYQNLLSGGLVPTKPPTPGDPMPPNPQPQTSVLIRKYAI  300
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  246  PDDFQLSIFESEDKGDKYNKGYQNLLSGGLVPTKPPTPGDPMPPNPQPQTTSVLIRKYAI 305

Qy  301  GDYSKLLEGATLQLTGDNVNSFQARVFSSNDIGERIELSDGTYLTLELNSPAGYSIAEPI 360
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  306  GDYSKLLEGATLQLTGDNVNSFQARVFSSNDIGERIELSDGTYVTLELNSPAGYSIAEPI 365

Qy  361  TFKYEAGKVYTIIDGKQIENPNKEIVEPYSVEAYNDFEEFSVLTTQNYAKFYYAKNKNGS 420
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Db  366  TFKYEAGKVYTIIDGKQIENPNKEIVEPYSVEAYNDFEEFSVLTTQNYAKFYYAKNKNGS 425

Qy  421  SQVYYCFNADLKSPPDSEDGGKTMTPDFTTGEVKYTHIAGRDLFKYTVKPRDTPDTFLK  480
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Db  426  SQVYYCFNADLKSPPDSEDGGKTMTPDFTTGEVKYTHIAGRDLFKYTVKPRDTPDTFLK  485

Qy  481  HIKKVIEKGYREKGQAIEYSGLIETQLRAATQLAIYYFDSAELDKDKLKDYHGFGDMND  540
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  486  HIKKVIEKGYREKGQAIEYSGLIETQLRAATQLAIYYFDSAELDKDKLKDYHGFGDMND  545

Qy  541  STLAVAKILVEYAQDSNPEQLTLDLFFIPNNNKYQSLLGTQWHPEDLYDIIRMEDKKEVI 600
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Db  546  STLAVAKILVEYAQDSNPEQLTLDLFFIPNNNKYQSLLGTQWHPEDLYDIIRMEDKKEVI 605

Qy  601  PVTHNLTRKTVTGLAGDRTKDFHFEIELKNNKQELLSQTVKIDKTNLEFFKDGKATINLK 660
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Db  606  PVTHNLTRKTVTGLAGDRTKDFHFEIELKNNKQELLSQTVKIDKTNLEFFKDGKATINLK 665

Qy  661  HGESLTLQGLPEGYSYLVKETDSEGYKVKVNSQEVANATVSKGITSDETLAFENNKEPV  720
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Db  666  HGESLTLQGLPEGYSYLVKETDSEGYKVKVNSQEVANATVSKGITSDETLAFENNKEPV  725

Qy  721  VPTGVDQKINGYLALIVIAGISLGIWGIHTIRIRKHD 757
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Db  726  VPTGVDQKINGYLALIVIAGISLGIWGIHTIRIRKHD 762
```

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RESULT 2
ABP29050
ID   ABP29050 standard; protein; 340 AA.
XX
AC   ABP29050;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Streptococcus polypeptide SEQ ID NO 7276.
XX
KW   Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae;
KW   group A streptococcus; Streptococcus pyogenes; antibacterial;
KW   antiinflammatory; infection; vaccine; meningitis; gene therapy.
XX
OS   Streptococcus pyogenes.
XX
PN   WO200234771-A2.
XX
PD   02-MAY-2002.
XX
PF   29-OCT-2001; 2001WO-GB04789.
XX
PR   27-OCT-2000; 2000GB-0026333.
PR   24-NOV-2000; 2000GB-0028727.
PR   07-MAR-2001; 2001GB-0005640.
XX
DR   WPI; 2002-352536/38;
DR   N-PSDB; ABN69681.
XX
PI   Telford J, Masignani V, Margarit Ros YI, Grandi G, Fraser C;
PI   Tettelin H;
XX
PT   New Streptococcus protein for the treatment or prevention of infection
PT   or disease caused by Streptococcus bacteria, such as meningitis, and
PT   for detecting a compound that binds to the protein -
XX
PS   Claim 1; Page 3880; 4525pp; English.
XX
CC   The invention relates to a protein (ABP25413-ABP308095) from group B
CC   streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS
CC   (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in
CC   the specification. The proteins have antibacterial and antiinflammatory
CC   activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and
CC   antibodies that bind (I) are used in the manufacture of medicaments for
CC   the treatment or prevention of infection or disease caused by
CC   Streptococcus bacteria, particularly S. agalactiae and S. pyogenes.
CC   Nucleic acids encoding (I) are used to detect Streptococcus in a
CC   biological sample. (I) is used to determine whether a compound binds to
CC   (I). A composition comprising (I) or a nucleic acid encoding (I), may be
CC   used as a vaccine or diagnostic composition. The disease caused by
CC   Streptococcus that is prevented or treated may be meningitis. Nucleic
CC   acid encoding (I) may be used to recombinantly produce (I) and may be
CC   used in gene therapy. Antibodies to (I) are used for affinity
CC   chromatography, immunoassays, and distinguishing/identifying
CC   Streptococcus proteins.
XX
SQ   Sequence  340 AA;
```

(CHIR-) CHIRON SPA.
(GENO-) INST GENOMIC RES.